June 28, 1982

DOCUMENTATION RECORDS
FOR
HAZARD RANKING SYSTEM

INSTRUCTIONS: The purpose of these records is to provide a convenient way to prepare an auditable record of the data and documentation used to apply the Hazard Ranking System to a given facility. As briefly as possible summarize the information you used to assign the score for each factor (e.g., "Waste quantity = 4,230 drums plus 800 cubic yards of sludges"). The source of information should be provided for each entry and should be a bibliographic-type reference that will make the document used for a given data point easier to find. Include the location of the document and consider appending a copy of the relevant page(s) for ease in review.

FACILITY NAME: National Lead / TARACorp

LOCATION: 16Th & Cleveland Blvd. GRANITE CITY, IL 62040

Site not qualified for NPL - site as interium status!

GROUND WATER ROUTE

1 OBSERVED RELEASE

Contaminants detected (5 maximum):

LEAD

Rationale for attributing the contaminants to the facility:

GROUND WATER TABLE IS ONLY 7 TO 10 FT. BELOW THE SURFACE

12/13/82 USEPA MEMO FROM BONIFACE** THAHL TO STEVE ROTHBLATT, p. 2

SCORES a (45)

2 ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifers(s) of concern:

OBSERVED RELEASE

Depth(s) from the ground surface to the highest seasonal level of the saturated zone [water table(s)] of the aquifer of concern:

Depth from the ground surface to the lowest point of waste disposal/ storage:

Net Precipitation

Mean annual or seasonal precipitation (list months for seasonal):

Mean annual lake or seasonal evaporation (list months for seasonal):

Net precipitation (subtract the above figures):

OBSERVED RELEASE

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

Permeability associated with soil type:

Physical State

Physical state of substances at time of disposal (or at present time for generated gases):

* * *

3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

OBSERVED RELEASE

Method with highest score:

4 WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated:	Toxicity	Persistence
Lead . Pb	3	3

SAX 5th ed.

Compound with highest score:

Pb : Total score : 18

p. 18 HWS manual toxicity/persistence matrix

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

K069 Secondary Lead: Emission control dust/sludge from secondary lead smelting → 6,355 tons

Scores an (b) >2500 Tons/cu yds

Basis of estimating and/or computing waste quantity:

EPA Form 3510-1 (6-80) RCRA notification for interium status received Nov. 18, 1980 from company

* * *

5 TARGETS

Ground Water Use

Use(s) of aquifer(s) of concern within a 3-mile radius of the facility:

Industrial/Commercial - Mississippi River is the major water source
Illinois State water Survey: see copies of 'score sheets for Cahokia/Dead Creek and Southern RR/E. St. Louis

Scores a (1)

Distance to Nearest Well

Location of nearest well drawing from aquifer of concern or occupied building not served by a public water supply:

Granite City Steel plant: p. 22 from "Study of Lead in Granite City, Madison and Venice, Illinois" April 1983 by the IEPA

Steel plant is located SE of site at 20th & Madison

Distance to above well or building:

~ 1/4 mile or 1320ft.

Scores a (4)

Population Served by Ground Water Wells Within a 3-Mile Radius

Identified water-supply well(s) drawing from aquifer(s) of concern within a 3-mile radius and populations served by each:

None: municipal wells closest to site are ~ 6 miles east of site

Computation of land area irrigated by supply well(s) drawing from aquifer(s) of concern within a 3-mile radius, and conversion to population (1.5 people per acre):

None

Total population served by ground water within a 3-mile radius:

(0) source: p 22 "Study of Lead .... Illinois" April 1983 by IEPA.

Scores a (0)

TOTAL from matrix: (0)

SURFACE WATER ROUTE

1 OBSERVED RELEASE

Contaminants detected in surface water at the facility or downhill from it (5 maximum):

None

Rationale for attributing the contaminants to the facility:

Waste pile with high lead levels

* * *

2 ROUTE CHARACTERISTICS

Facility Slope and Intervening Terrain

Average slope of facility in percent:

<1% determined from the Granite City IL - MO. Quad 7.5 min. series 1954 photorevised 1968 & 1974

Name/description of nearest downslope surface water:

Horseshoe Lake

Mississippi River

Average slope of terrain between facility and above-cited surface water body in percent:

$\frac{400 - 400}{10032} \times 100 = .2\%$ Granite City IL - MO Quad

Total Score: (0)

Is the facility located either totally or partially in surface water?

NO

Is the facility completely surrounded by areas of higher elevation?

No

1-Year 24-Hour Rainfall in Inches

3" p. 33 HWS Ranking Manual - Fig. #8. 1yr 24 hr. Rainfall map

Scores a (2)

Distance to Nearest Downslope Surface Water

1.9 miles from Granite City, IL - MO Quad

Scores a (1)

Physical State of Waste

p. 25 of report: disposed of at an approved Landfill

Dust/Sludge - From KCKA permit application

Scores a (2) pp 19, 20 "Study of Lead... Illinois" by IEPA April 1993

* * *

3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

Piles not covered, no diversion Scores a (3)

pp. 25, 27 "Study of Lead ... Illinois" by IEPA April 1993

↳ photo

Method with highest score:

4 WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated

See GW Route

Compound with highest score:

See GW Route

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

See GW Route

Basis of estimating and/or computing waste quantity:

See GW Route

* * *

5 TARGETS

Surface Water Use

Use(s) of surface water within 3 miles downstream of the hazardous substance:

Drinking → Scores a (3)

p. 22 "Study of Lead Pollution . . . Illinois" April 1983 by IEPA

Is there tidal influence?

No

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

N/A

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

None : ~5 miles to a fresh-water wetland
- determined from Quad.

Distance to critical habitat of an endangered species or national wildlife refuge, if 1 mile or less:

None

Population Served by Surface Water

Location(s) of water-supply intake(s) within 3 miles (free-flowing bodies) or 1 mile (static water bodies) downstream of the hazardous substance and population served by each intake:

Illinois American Interurban Water Co.

Intake at ~ 191 River mile which is 3 miles downstream

Source : Southern RR, E. St Louis Site - HWR Sheet
- hard to make call to check

Computation of land area irrigated by above-cited intake(s) and conversion to population (1.5 people per acre):

None

Total population served:

>10,000 Granite City 39,900 > Rand Mc Nally Road Atlas
Madison 24,700

Name/description of nearest of above water bodies:

Mississippi River
Horseshoe Lake

Distance to above-cited intakes, measured in stream miles.

3 miles

TOTAL SCORE PWP/Dist to SW matrix: 20 ; however, this becomes (0) due to no release(s) from the site and there are to many interceptions for a release to get to the river

AIR ROUTE

1 OBSERVED RELEASE

Contaminants detected:

Pb

Date and location of detection of contaminants

Quarterly ambient lead averages (based on individual 24 hr samples taken every 6 days)

p. 10-17 "Study of Lead Pollution ... Illinois" April 1983 by IEPA

Methods used to detect the contaminants:

p. 5 "Study of Lead Pollution ... Illinois" April 1983 by IEPA

Rationale for attributing the contaminants to the site:

Waste pile not covered

2ndary smelter

* * *

2 WASTE CHARACTERISTICS

Reactivity and Incompatibility

Most reactive compound:

Pb : scores a (0)

Sax 5th edition

Most incompatible pair of compounds:

None

Toxicity

Most toxic compound:

Pb → (3)

Hazardous Waste Quantity

Total quantity of hazardous waste:

See GW Route

Basis of estimating and/or computing waste quantity:

See GW Route

* * *

3 TARGETS

Population Within 4-Mile Radius

Circle radius used, give population, and indicate how determined:

0 to 4 mi	0 to 1 mi	0 to 1/2 mi	0 to 1/4 mi
		1/16 GC = 2432	1/32 of Grant City = 1216
		3/9 M = 5488	1/9 of Maitland = 2744
		7920	3960
		Scores a (24)	

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

None

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

None

Distance to critical habitat of an endangered species, if 1 mile or less:

None

Land Use

Distance to commercial/industrial area, if 1 mile or less:

<¼ mile Granite City IL - MO Quad.

Scores a (3)

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

~6 miles to state park

Distance to residential area, if 2 miles or less:

.2 miles Granite City IL - MO Quad.

Scores a (3)

Distance to agricultural land in production within past 5 years, if 1 mile or less:

None

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:

None

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?

NO